

TITLE: PROCESS FOR TREATING JUICES WITH ACTIVATED OXYGEN

ABSTRACT

A PROCESS FOR ACHIEVING A 5 LOG REDUCTION (99.9%) IN BACTERIA IN JUICES USING ULTRAVIOLET GENERATED ACTIVATED OXYGEN GAS. THE JUICE IS IN A HOLDING TANK AND THE GAS IS INTRODUCED USING A SPARGING SYSTEM THAT ALLOWS THE GAS TO BE DELIVERED IN 20 to 60 MICRON SIZE BUBBLES FOR GREATER CONTACT AREA BETWEEN THE JUICE AND GAS ALLOWING THE ACTIVATED OXYGEN TO REDUCE BACTERIA FAST AND EFFICIENTLY.

CLAIMS

WHAT IS CLAIMED IS:

1. A PROCESS FOR TREATMENT OF JUICES, COMPRISING THE STEPS OF:
 - A. PUTTING THE JUICE IN A HOLDING , EQUALIZING, BLENDING, OR CHILLING TANK
 - B. SPARGING ULTRA VIOLET GENERATED ACTIVATED OXYGEN INTO THE SOLUTION
 - C. SPARGING INTO SOLUTION FOR SUFFICIENT PERIOD OF TIME(DEPENDENT ON SIZE OF HOLDING TANK) TO ALLOW THE ACTIVATED OXYGEN GAS TO COME INTO CONTACT WITH THE BACTERIA.

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